COMPUTE THIS

1. **DESCRIPTION**: This event integrates Personal Computing (PC) technology, the Internet, and quantitative data analysis. Teams are presented with a problem that requires quantitative data capture from the public Internet and the organization and presentation of data in a graphical format. Short answer questions related to the problem are also included.

   A TEAM OF UP TO: 2   **APPROXIMATE TIME**: 50 Minutes

2. **EVENT PARAMETERS**: No resource materials or calculators may be used during the competition. Blank tablet paper and writing instruments may be used to assist teams in organizing their thoughts, if desired. Prior to the event, teams may construct their own publicly accessible (non-password protected) websites to organize URL links and reference information for use during the competition. Teams may also freely access any publicly accessible www site or search engine (e.g., Google or others) to locate information within the **http://www.noaa.gov/** domain. However, during the event, no external communication is permitted with other individuals via e-mail, chat rooms, or other forms of collaborative computing; the penalty for an infraction of this nature will be immediate disqualification.

3. **THE COMPETITION**:

   a. Each team will be provided with **one personal computer** with a WWW browser **(Internet Explorer 7.0 or higher and/or Firefox 3.0 or higher)**, and **broadband** Internet access. **To eliminate proprietary software and version issues, teams will access a web site with an Open Office, MS-compatible word processor and spreadsheet (e.g., Google docs) to use during using the competition.**

   b. Teams will be given a problem in the area of **weather and severe storms**, and all required information will be located on web sites within the **http://www.noaa.gov/** domain.

   c. The problem statement will require the capture of quantitative information from the Internet followed by spreadsheet data entry and graphical presentation. A specific chart format (e.g., line chart, pie chart, column chart, etc.) will be defined in the problem statement. All charts must include labeling for each axis (including units of measure) and legends to properly label data within the chart (i.e., elements within a pie chart, multiple lines in a line graph, etc.). **No URLs are required in the data table or the chart to identify the source of information, but all data must come from the http://www.noaa.gov/ domain.**

   d. The problem statement will also include up to five (5) short answer questions. Questions may involve analysis of data previously collected or require additional facts to be gathered via Internet search. Where additional searches are required, teams **must** list the specific source URL associated with each answer. The URL must be complete and must point to information within the **http://www.noaa.gov/** domain.

   e. Teams will construct a **spreadsheet** file that contains the data tables and graphics associated with the problem and a **document** file that contains the answers and URLs associated with the short answer questions. The event supervisor will specify how these files are to be submitted at the conclusion of the event. Teams should include their school name and team number (as appropriate) within both files to ensure proper identification by the event supervisor.
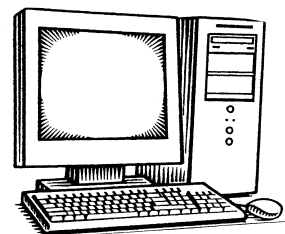
4. **SCORING:** High score wins based on a-c.

   a. Completeness and Accuracy of Quantitative Data Collected-20 Points
   b. Completeness, Accuracy, and Format of Graphical Data Presentation-30 Points
   c. Answers and URLs Associated with Short Answer Questions-50 Points.
   d. The tiebreakers shall be:
      i. The number of short answer questions correctly answered
      ii. The completeness and accuracy of quantitative data collected
      iii. The overall quality of graphical data presentation

Recommended Resources: All reference and training resources including the **Problem Solving/Technology CD** are available on the Official Science Olympiad Store or Website at www.soinc.org